

BASELINE NOISE MEASUREMENTS

Site Number: 1			
Recorded By: Lindsay Liegler			
Job Number: 2017-276.009			
Date: 2/11/2022 – 2/15/2022			
Time: 11:04 a.m. – 5:46 a.m.			
Location: Near the southern portion of the Project Site approximately 50 feet from Elden Way.			
Source of Peak Noise: Landscaping/ gardening (leaf blowers)			
Noise Data			
LA _{eq} (dB)	L _{min} (dB)	L _{max} (dB)	CNEL
45.7	24.1	83.1	49.4

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Larson Davis	LxT SE	0005120	11/29/2021	
	Microphone	Larson Davis	377B02	334361	11/30/2021	
	Preamp	Larson Davis	PRMLxT1L	042852	11/30/2021	
	Calibrator	Larson Davis	CAL200	14105	11/10/2021	
Weather Data						
Est.	Duration: 90 hours			Sky: Clear		
	Note: dBA Offset = -0.01			Sensor Height (ft): 3.5		
	Wind Ave Speed (mph)		Temperature (degrees Fahrenheit)		Barometer Pressure (hPa)	
	5		75		30.03	

Photo of Measurement Location



Measurement Report

Report Summary

Meter's File Name	LxT_Data.098.s	Computer's File Name	LxT_0006133-20220211 110412-LxT_Data.098.ldbin	
Meter	LxT1 0006133			
Firmware	2.404			
User		Location		
Job Description				
Note				
Start Time	2022-02-11 11:04:12	Duration	90:42:12.0	
End Time	2022-02-15 05:46:24	Run Time	90:42:12.0	Pause Time 0:00:00.0

Results

Overall Metrics

LA _{eq}	45.7 dB		
LAE	100.9 dB	SEA	130.2 dB
EA	1.4 mPa ² h		
EA8	120.1 μPa ² h		
EA40	600.7 μPa ² h		
LZS _{peak}	120.2 dB	2022-02-11 11:04:59	
LAS _{max}	83.1 dB	2022-02-11 11:04:59	
LAS _{min}	28.1 dB	2022-02-15 01:48:09	
LA _{eq}	45.7 dB		
LC _{eq}	59.6 dB	LC _{eq} - LA _{eq}	13.8 dB
LA _{1eq}	50.4 dB	LA _{1eq} - LA _{eq}	4.7 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
48.9 dB	47.3 dB	0.0 dB	
LDEN	LDay	LEve	LNight
49.4 dB	47.7 dB	45.2 dB	40.7 dB

Any Data

A	C	Z
Level	Level	Level
Time Stamp	Time Stamp	Time Stamp
L _{eq} 45.7 dB	--- dB	--- dB
L _S (max) 83.1 dB	--- dB	--- dB
L _S (min) 28.1 dB	--- dB	--- dB
L _{Peak} (max) --- dB	--- dB	120.2 dB
		2022-02-11 11:04:59

Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	48.6 dB
LAS 10.0	45.9 dB
LAS 33.3	42.4 dB
LAS 50.0	40.7 dB
LAS 66.6	38.8 dB
LAS 90.0	35.2 dB

TRAFFIC NOISE MODELING OUTPUTS

TRAFFIC NOISE LEVELS

Project Number: 2017-276.009
Project Name: VRG

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
 Analysis Scenario(s): Existing
 Source of Traffic Volumes: KOA 2022
 Community Noise Descriptor: L_{dn} : _____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour L_{eq} dB(A)	24-Hour CNEL dB(A)
Analysis Condition													
North Beverly Drive													
North of Lexington Road	Residential	2	0	0	5,868	35	100	0	0	1.8%	0.7%	0.0	59.4
South of Lexington Road	Residential	2	0	0	4,203	35	100	0	0	1.8%	0.7%	0.0	58.0
North Crescent Drive													
South of Lexington Road	Residential	2	0	0	783	35	100	0	0	1.8%	0.7%	0.0	50.7
Between Lexington Road and Elden Way	Residential	2	0	0	103	35	100	0	0	1.8%	0.7%	0.0	41.9
Elden Way													
North of North Crescent Drive	Residential	2	0	0	54	35	100	0	0	1.8%	0.7%	0.0	39.1
Lexington Road													
East of North Beverly Drive	Residential	2	0	0	1,206	35	100	0	0	1.8%	0.7%	0.0	52.5
Between North Beverly Drive and Crescent D	Residential	2	0	0	1,939	35	100	0	0	1.8%	0.7%	0.0	54.6
Between Crescent Drive and Oxford Way	Residential	2	0	0	2,497	35	100	0	0	1.8%	0.7%	0.0	55.7
Between Oxford Way and Hartford Way	Residential	2	0	0	2,466	35	100	0	0	1.8%	0.7%	0.0	55.7
Between Hartford Way and Benedict Canyon	Residential	2	0	0	1,179	35	100	0	0	1.8%	0.7%	0.0	52.5
West of Benedict Canyon Drive	Residential	2	0	0	1,638	35	100	0	0	1.8%	0.7%	0.0	53.9
Oxford Way													
South of Lexington Road	Residential	2	0	0	90	35	100	0	0	1.8%	0.7%	0.0	41.3
Hartford Way													
South of Lexington Road	Residential	2	0	0	108	35	100	0	0	1.8%	0.7%	0.0	42.1
Between Lexington Road and Cove Way	Residential	2	0	0	1,683	35	100	0	0	1.8%	0.7%	0.0	54.0
Between Cove Way and Benedict Canyon Ro	Residential	2	0	0	702	35	100	0	0	1.8%	0.7%	0.0	50.2
West of Benedict Canyon Road	Residential	2	0	0	288	35	100	0	0	1.8%	0.7%	0.0	46.3
Cove Way													
North of Hartford Way	Residential	2	0	0	2,349	35	100	0	0	1.8%	0.7%	0.0	55.4
Benedict Canyon Drive													
South of Lexington Road	Residential	2	0	0	3,420	35	100	0	0	1.8%	0.7%	0.0	57.1
Between Lexington Road and North Roxbury	Residential	2	0	0	5,436	35	100	0	0	1.8%	0.7%	0.0	59.1
North of Hartford Way	Residential	2	0	0	8,793	35	100	0	0	1.8%	0.7%	0.0	61.2

TRAFFIC NOISE LEVELS

Project Number: 2017-276.009
Project Name: VRG

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
 Analysis Scenario(s): Existing + Project
 Source of Traffic Volumes: KOA 2022
 Community Noise Descriptor: L_{dn} : _____ CNEL: X

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour L_{eq} dB(A)	24-Hour CNEL dB(A)
Analysis Condition													
North Beverly Drive													
North of Lexington Road	Residential	2	0	0	5,886	35	100	0	0	1.8%	0.7%	0.0	59.4
South of Lexington Road	Residential	2	0	0	4,266	35	100	0	0	1.8%	0.7%	0.0	58.0
North Crescent Drive													
South of Lexington Road	Residential	2	0	0	801	35	100	0	0	1.8%	0.7%	0.0	50.8
Between Lexington Road and Elden Way	Residential	2	0	0	323	35	100	0	0	1.8%	0.7%	0.0	46.8
Elden Way													
North of North Crescent Drive	Residential	2	0	0	252	35	100	0	0	1.8%	0.7%	0.0	45.7
Lexington Road													
East of North Beverly Drive	Residential	2	0	0	1,224	35	100	0	0	1.8%	0.7%	0.0	52.6
Between North Beverly Drive and Crescent D	Residential	2	0	0	2,006	35	100	0	0	1.8%	0.7%	0.0	54.8
Between Crescent Drive and Oxford Way	Residential	2	0	0	2,497	35	100	0	0	1.8%	0.7%	0.0	55.7
Between Oxford Way and Hartford Way	Residential	2	0	0	2,556	35	100	0	0	1.8%	0.7%	0.0	55.8
Between Hartford Way and Benedict Canyon	Residential	2	0	0	1,260	35	100	0	0	1.8%	0.7%	0.0	52.7
West of Benedict Canyon Drive	Residential	2	0	0	1,638	35	100	0	0	1.8%	0.7%	0.0	53.9
Oxford Way													
South of Lexington Road	Residential	2	0	0	90	35	100	0	0	1.8%	0.7%	0.0	41.3
Hartford Way													
South of Lexington Road	Residential	2	0	0	108	35	100	0	0	1.8%	0.7%	0.0	42.1
Between Lexington Road and Cove Way	Residential	2	0	0	1,692	35	100	0	0	1.8%	0.7%	0.0	54.0
Between Cove Way and Benedict Canyon Ro	Residential	2	0	0	711	35	100	0	0	1.8%	0.7%	0.0	50.3
West of Benedict Canyon Road	Residential	2	0	0	288	35	100	0	0	1.8%	0.7%	0.0	46.3
Cove Way													
North of Hartford Way	Residential	2	0	0	2,358	35	100	0	0	1.8%	0.7%	0.0	55.5
Benedict Canyon Drive													
South of Lexington Road	Residential	2	0	0	3,510	35	100	0	0	1.8%	0.7%	0.0	57.2
Between Lexington Road and North Roxbury	Residential	2	0	0	5,436	35	100	0	0	1.8%	0.7%	0.0	59.1
North of Hartford Way	Residential	2	0	0	8,802	35	100	0	0	1.8%	0.7%	0.0	61.2

ONSITE NOISE MODELING OUTPUTS

**SoundPLAN
Output Source Information**

Number	Receiver Name	Location	Level at Ground Floor
1	Residential	House 1025 (south of Project Site)	19.9 dBA
2	Residential	House 1006 (south of Project Site)	27.9 dBA
3	Residential	House 1005 (south of Project Site)	27.1 dBA
4	Residential	House 1024 (south of Project Site)	37.4 dBA
5	Residential	House 1027 (west of Project Site)	34.7 dBA
6	Residential	House 1031 (west of Project Site)	33.1 dBA
7	Residential	House 1032 (west of Project Site)	30.4 dBA
8	Residential	House 1034 (north of Project Site)	30.8 dBA
9	Residential	House 1036 (north of Project Site)	31.5 dBA
10	Residential	House 1055 (north of Project Site)	35.1 dBA
11	Residential	House 1045 (north of Project Site)	41.3 dBA
12	Residential	House 1035 (north of Project Site)	31.2 dBA
13	Residential	House 1028 (northeast of Project Site)	16.1 dBA
14	Residential	House 1019 (east of Project Site)	14.7 dBA
15	Residential	House 1017 (southeast of Project Site)	14.5 dBA
16	Residential	House 1015 (southeast of Project Site)	13.6 dBA

Number	Noise Source Information	Citation	Level at Source
1	Crowd Noise	M.J. Hayne, et al, Prediction of Crowd Noise, Acoustics, November 2006.	62.0 dBA

**SoundPLAN
Output Source Information**

Number	Receiver Name	Location	Level at Ground Floor
1	Residential	House 1025 (south of Project Site)	52.4 dBA
2	Residential	House 1006 (south of Project Site)	58 dBA
3	Residential	House 1005 (south of Project Site)	57.5 dBA
4	Residential	House 1024 (south of Project Site)	52.2 dBA
5	Residential	House 1027 (west of Project Site)	66.1 dBA
6	Residential	House 1031 (west of Project Site)	69.4 dBA
7	Residential	House 1032 (west of Project Site)	63.4 dBA
8	Residential	House 1034 (north of Project Site)	59.7 dBA
9	Residential	House 1036 (north of Project Site)	61.6 dBA
10	Residential	House 1055 (north of Project Site)	66.5 dBA
11	Residential	House 1045 (north of Project Site)	72.1 dBA
12	Residential	House 1035 (north of Project Site)	55.4 dBA
13	Residential	House 1028 (northeast of Project Site)	46.8 dBA
14	Residential	House 1019 (east of Project Site)	43.3 dBA
15	Residential	House 1017 (southeast of Project Site)	46 dBA
16	Residential	House 1015 (southeast of Project Site)	47.5 dBA

Number	Noise Source Information	Citation	Level at Source
1	High Intensity Amplified Music	ECORP Consulting, Inc. Reference Noise Measurement (Rock/ Reggae Concert)	108.1 dBA
2	Crowd Noise	M.J. Hayne, et al, Prediction of Crowd Noise, Acoustics, November 2006.	62.0 dBA

**SoundPLAN
Output Source Information**

Number	Receiver Name	Location	Level at Ground Floor
1	Residential	House 1025 (south of Project Site)	45.8 dBA
2	Residential	House 1006 (south of Project Site)	45.8 dBA
3	Residential	House 1005 (south of Project Site)	51 dBA
4	Residential	House 1024 (south of Project Site)	46.1 dBA
5	Residential	House 1027 (west of Project Site)	59.5 dBA
6	Residential	House 1031 (west of Project Site)	62.9 dBA
7	Residential	House 1032 (west of Project Site)	56.8 dBA
8	Residential	House 1034 (north of Project Site)	53.1 dBA
9	Residential	House 1036 (north of Project Site)	55.0 dBA
10	Residential	House 1055 (north of Project Site)	59.9 dBA
11	Residential	House 1045 (north of Project Site)	65.5 dBA
12	Residential	House 1035 (north of Project Site)	48.9 dBA
13	Residential	House 1028 (northeast of Project Site)	40.2 dBA
14	Residential	House 1019 (east of Project Site)	36.7 dBA
15	Residential	House 1017 (southeast of Project Site)	39.4 dBA
16	Residential	House 1015 (southeast of Project Site)	40.9 dBA

Number	Noise Source Information	Citation	Level at Source
1	Moderate Intensity Amplified Music	ECORP Consulting, Inc. Reference Noise Measurement (Small Country Band)	101.5 dBA
2	Crowd Noise	M.J. Hayne, et al, Prediction of Crowd Noise, Acoustics, November 2006.	62.0 dBA